ERA Needs Analysis Methodology

To determine future demand for commercial and industrial lands, the County of San Diego retained Economics Research Associates to prepare a 'needs analysis' of retail commercial, industrial, and office uses for each of the County's Community Planning Areas. The methodology used in completing this study is summarized below. The entire Needs Analysis report is available for public download on the GP2020 website.

Retail Land Demand

The amount of retail commercial that may be supported by a planning area is based on the consumer buying power of each Community Planning Area. This methodology is commonly used for retail land demand projections and is preferable to using per capita ratios that do not account for differences in intensity of development or community shopping patterns. The methodology is as follows:

1. Using household income and spending data (based on the 2000 Census, SANDAG 2030 Cities/County Forecast, Bureau of Labor consumer expenditure statistics, and ERA estimates), the buying power of the Community Planning Areas is calculated from the projected number of households (at plan buildout), current and projected median and mean incomes, the estimated percentage of income spent on retail items, and the estimated annual expenditures per household.

2. The estimated buying power is then divided by the type of shopping center (community, neighborhood, and regional/super-regional centers) as well as outside of centers (stand alone outlets, strip commercial, and retail districts). The percentages used (13 percent in neighborhood centers, 19 percent in community centers, 26 percent in regional/super-regional centers, and 42 percent outside of centers) are based on County-wide averages. This step allows the model to reflect different characteristics of retail building types.

3. For each type of center and non-center, the estimated buying power is multiplied by a capture rate, which reflects the amount of retail spending a community will do locally if that commercial use is provided. A capture rate of 90 percent is used for neighborhood, community, and non-center. This is an aggressive estimate, but it helps ensure retail demand is not underestimated. A zero capture rate is used for regional/super-regional because the type of shopping that occurs in this scale of center is done in the incorporated area (or via internet or mail order) and none of the Planning Areas can accommodate a regional or super-regional center.

4. After the capture rate is applied for each type of center/non-center, the result is divided by average sales per square foot (based on the Urban Land Institute data for the western United States) to determine an estimated supportable square footage for each Planning Area and Subarea. The square footage is multiplied by an average Floor Area Ratio (FAR) of 0.25 for communities served by the County Water Authority and 0.16 for communities reliant on groundwater. The result is a net and gross acreage (net acreage is considered equal to 85 percent of gross acreage) for each Planning Area and Subarea.

5. Finally, the estimated gross acreage for neighborhood, community, and non-center retail is compared with the amount of land each Planning Area and Subarea has

already developed (based on SANDAG existing land use data) and planned (both for the existing General Plan and for the two Board-approved alternatives) to determine which areas have a surplus or deficit of retail commercial land for the projected residential buildout.

It is important to note that the estimates are for the amount of retail land that may be supported by the projected *resident* population for each planning area (at plan buildout). The estimates do not account for retail demand generated by tourists or residents of outside communities. Indeed, some communities have more retail land planned, or even developed, than is necessary to service the local population, as they are able to attract consumers from outside communities.

Industrial and Office Demand

A separate methodology is used to estimate the amount of employment land (industrial and office) demand for each Planning Area and Subarea. This model uses SANDAG employment forecasts for 2020 (prepared for the County in 2002) as the basis for its estimates. The methodology is described briefly below.

Industrial Demand

Industrial land demand is based on the projected employment growth in industrially related job sectors (i.e. manufacturing, wholesale trade, transportation, construction services). The number of projected employees is multiplied by the average square foot per employee factor (based on the countywide average in the year 2000), resulting in an estimated total square footage per Planning Area and Subarea. The square footage totals are then multiplied by a site coverage ratio of 45 percent to determine a net acreage demand. A net to gross ratio of 70 percent[1] is used to determine gross acreage demand. As with retail commercial lands, the gross acreage is compared with developed and planned acreages to determine which areas have a surplus or deficit of industrial land for the projected demand.

Office Demand

Office land demand is calculated using the same methodology as industrial, except that different employment categories (i.e. finance, insurance, real estate, medical services) and a different average square foot per employee factor are used.

Relationship Between the General Plan Designations and the Assumptions of Uses

The following table illustrates how retail, industrial and office uses were assumed to be distributed within the General Plan designations. These assumptions were based on the uses that generally occur in the designations throughout the unincorporated areas of the county. Both existing and proposed designations are included in the table.

[1] A net to gross ratio of 40 percent was used for Lakeside based on further staff analysis.

General Plan Designation	***Assumed Retail***	***Assumed Office***	***Assumed Industrial***
Neighborhood Commercial	100%		
General Commercial	90%	10%	
Service Commercial	20%		80%
Office Professional			
Visitor-Serving Commercial	20%		
Rural Commercial	60%	10%	
Limited Impact Industrial		10%	90%
General Impact Industrial (Medium and High)			100%

A complete description of assumptions and results are available in the ERA report, which is available for download on the GP2020 website[2].

[2] http://www.sdcounty.ca.gov/cnty/cntydepts/landuse/planning/GP2020/index.html